State of California
AIR RESOURCES BOARD

Executive Order G-70-150-AE
Modification to the Certification of the Marconi Commerce Systems Inc. (MCS) “Formerly Gilbarco” VaporVac Phase II Vapor Recovery System

WHEREAS, the California Air Resources Board ("the Board" or "CARB") has established, pursuant to California Health and Safety Code sections 39600, 39601 and 41954, certification procedures for systems designed for the control of gasoline vapor emissions during motor vehicle fueling operations (Phase II vapor recovery systems) in its "Certification and Test Procedures for Vapor Recovery Systems" (the "Certification Procedures") as last amended April 28, 2000, incorporated by reference in Title 17, California Code of Regulations, Section 94011;

WHEREAS, the Board has established, pursuant to California Health and Safety Code sections 39600, 39601 and 41954, test procedures for determining the compliance of Phase II vapor recovery systems with emission standards in its "Certification and Test Procedures for Vapor Recovery Systems" CP-201 (the "Test Procedures") as adopted April 12, 1996, and as last amended April 28, 2000, incorporated by reference in Title 17, California Code of Regulations, Section 94011;

WHEREAS, Marconi Commerce Systems Inc. (MCS), formerly Gilbarco Incorporated, requested and was granted certification of the VaporVac Phase II vapor recovery system ("VaporVac system") pursuant to the Certification Procedures and Test Procedures on March 26, 1993, by Executive Order G-70-150, and was granted modifications to the certification by Executive Orders G-70-150-AA, issued August 31, 1993, and G-70-150-AB, issued February 7, 1994, G-70-150-AC, issued February 26, 1996 and G-70-150-AD, issued August 1, 1996;

WHEREAS, MCS requested a modification to the certification to include the Encore and the Eclipse series dispensers and;

WHEREAS, the Air Resources Board deemed it necessary to modify the certification to include nozzles with miniboots and Air to Liquid (A/L) ratios associated with these nozzle types to be lowered from the existing 1.10 ± 0.10 to 1.0 ± 0.10;

WHEREAS, the requested modifications to the certification of the VaporVac system has been evaluated pursuant the Board's Certification Procedures using the Husky V34 6250, the Emco Wheaton A4505 and the OPW 12VW nozzles with miniboots;

WHEREAS, the Catlow ICVN nozzle with the miniboot was previously certified by G-70-188 to be used with the VaporVac system and conforms with the requirements for certification when used as specified in Exhibits 1 and 2;

WHEREAS, the Certification Procedure (CP-201) provides that the Executive Officer shall issue an order of certification if he or she determines that the vapor recovery system conforms to all of the applicable requirements set forth in the Certification Procedures; and

WHEREAS, I, Michael P. Kenny, Air Resources Board Executive Officer, find that the VaporVac system conforms with all the requirements set forth in the Certification Procedures, and results in a vapor recovery system which is at least 95 percent effective for attendant and/or self-serve use at gasoline service stations when used in conjunction with a Phase I vapor recovery system which has been certified by the Board.

NOW, THEREFORE, IT IS HEREBY ORDERED that the VaporVac system is certified to be at least 95 percent effective in attended and/or self-serve mode when used with a CARB-certified Phase I vapor recovery system as specified in Exhibit 2 of this Order. **Fugitive emissions which may occur when the underground storage tanks are under positive pressure have not been quantified and were not included in the calculation of system effectiveness. Compatibility of this system with the onboard refueling vapor recovery systems has not been evaluated.** Exhibit 1 contains a list of the equipment certified for use with the VaporVac system. Exhibit 2 contains installation and performance specifications for the equipment listed in Exhibit 1. Exhibit 3 contains a static decay test procedure.

IT IS FURTHER ORDERED **that all new MCS VaporVac systems installed after August 1, 2000, shall use nozzles that incorporate vapor check valves and "mini-boots" and the A/L range for all new systems installed after August 1, 2000, shall be 1.0 ± 0.1.**

IT IS FURTHER ORDERED that the dispensing rate for VaporVac systems shall not exceed ten gallons per minute (10.0 gpm) at any time. This is consistent with the flowrate limitation imposed by United States Environmental Protection Agency as specified in the Federal Register, Volume 58, Number 55, page 16019. Exhibit 4 contains a procedure for verifying dispensing rate.

IT IS FURTHER ORDERED that compliance with the certification requirements and rules and regulations of the Division of Measurement Standards of the Department of Food and Agriculture, the State Fire Marshal's Office, and the Division of Occupational Safety and Health of the Department of Industrial Relations is made a condition of this certification.

IT IS FURTHER ORDERED that the following requirements are made a condition of certification. The VaporVac system shall be installed only in facilities which are capable of demonstrating on-going compliance with the vapor integrity requirements contained in Exhibit 3 of this Order. The owner or operator of the installation shall conduct, and pass, a Static Pressure Decay test as specified in Exhibit 3, no later than 60 days after startup and at least once in each twelve month period. The owner or operator of the installation shall conduct, and pass, an Air-to-Liquid Ratio test as specified in TP-201.5 no later than 60 days after startup and at least once in each twelve month period thereafter. The test results shall be made available to the local air pollution control or air quality management district upon request within fifteen calendar days after the tests are conducted, or within fifteen calendar days of the request. These results should be submitted in a district approved format. Alternative test procedures may be used if determined by the Executive Officer, in writing, to yield comparable results.

IT IS FURTHER ORDERED that the system, as installed, shall comply with the procedures and performance standards, which the test installation was required to meet during certification testing. Local districts may adopt stricter procedures or performance standards in accordance with the California Health and Safety Code section 41954 (g). Failure to demonstrate compliance with procedures or performance standards which are stricter than those imposed during certification testing does not, per se, constitute failure of the VaporVac system to meet the terms and conditions of this Executive Order. If, in the judgment of the Executive Officer, a significant fraction of installations fail to meet the specifications of this certification, or if a significant portion of the vehicle population is found to have configurations which significantly impair the system's collection efficiency, the certification itself may be subject to modification, suspension or revocation.

IT IS FURTHER ORDERED that all nozzles approved for use with the VaporVac system shall be 100 percent performance checked at the factory including checks of the integrity of the vapor path, as specified in Exhibit 2 of this Order, and proper functioning of all automatic shut-off mechanisms.

IT IS FURTHER ORDERED that each vapor pump and the electronic circuitry with which it is to operate shall be matched and 100 percent performance checked at the factory, including verification that the vapor recovery system performance is within the range specified in Exhibit 2 of this Order. Vapor pumps and electronic components sold separately as replacement parts shall be tested after field installation to verify that the combination results in vapor recovery system performance within the range specified in Exhibit 2 of this Order.

IT IS FURTHER ORDERED that the certified VaporVac system shall be performance tested during installation for ability to dispense gasoline and collect vapors without difficulty in the presence of the station operator, owner or designee. The station operator, owner or designee shall be provided with CARB approved copies of the installation and maintenance manuals for the VaporVac system, to be maintained at the station, and shall also be provided with CARB approved instructions in the proper use of the VaporVac system, its repair and maintenance, and where system replacement and system components can be readily obtained.

IT IS FURTHER ORDERED that the certified VaporVac system shall be warranted in writing, for at least one year from the startup date of the original installation, to the ultimate purchaser and each subsequent purchaser within the warranty period, that the vapor recovery system is designed, built and equipped so as to conform at the time of original installation or sale with the applicable regulations and is free from defects in materials and workmanship which would cause the vapor recovery system to fail to conform with applicable regulations. Copies of the manufacturer's warranty for the VaporVac system shall be made available to the station manager, owner or operator.

IT IS FURTHER ORDERED that the certified VaporVac system shall, at a minimum, be operated in accordance with the manufacturer's recommended maintenance intervals and shall use the manufacturer's recommended operation, installation, and maintenance procedures.

IT IS FURTHER ORDERED that any alteration of the equipment, parts, design, or operation of the systems certified hereby is prohibited, and deemed inconsistent with this certification, unless such alteration has been approved by the Executive Officer or his/her designee.

IT IS FURTHER ORDERED that, upon the adoption of revised standards, an installed VaporVac system may continue to be used as provided in Certification Procedure CP-201, pursuant to California Health and Safety Code section 41956.1, which provides that whenever the Board revises performance or certification standards, any system or any system components certified under procedures in effect prior to the adoption of revised standards and installed prior to the effective date of the revised standards may continue to be used in gasoline marketing operations for a period of four years after the effective date of the revised standards, provided that all necessary repair and replacement parts or components shall be certified;

IT IS FURTHER ORDERED that the VaporVac system certification, Executive Order G-70-150-AD, issued August 1, 1996, is hereby superseded by this Executive Order.

Executed at Sacramento, California, this 12th day of July, 2000.

Michael P. Kenny
Signed Copy on File
Executive Officer

Attachments